

**Notice of Allowability**

Application No.

10/724,159

Examiner

Charles D. Garber

Applicant(s)

KUROKAWA ET AL.

Art Unit

2856

AN

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--**

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to 08/05/2004.
2. ☒ The allowed claim(s) is/are 2,4,6 and 7.
3. ☒ The drawings filed on 01 December 2003 are accepted by the Examiner.
4. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
  - a) ☐ All    b) ☐ Some\*    c) ☐ None    of the:
  1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

\* Certified copies not received: \_\_\_\_\_.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.  
**THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.**

5. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
6. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
  - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
    - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date \_\_\_\_\_.
  - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date \_\_\_\_\_.

Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
7. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

**Attachment(s)**

1. ☒ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☐ Information Disclosure Statements (PTO-1449 or PTO/SB/08),  
Paper No./Mail Date \_\_\_\_\_
4. ☐ Examiner's Comment Regarding Requirement for Deposit  
of Biological Material
5. ☐ Notice of Informal Patent Application (PTO-152)
6. ☐ Interview Summary (PTO-413),  
Paper No./Mail Date \_\_\_\_\_
7. ☐ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other \_\_\_\_\_

### **DETAILED ACTION**

Applicant's Petition entered 08/05/2004 requested Examiner reconsider the earlier rejection of 05/26/2004 because the Bloder reference (US Patent Application 2003/0029228 A1) did not qualify as prior art based on Applicant's earlier priority date.

Applicant's position is correct and the earlier rejection is hereby withdrawn.

### ***Allowable Subject Matter***

Claims 2, 4, 6 and 7 are allowed.

The following is an examiner's statement of reasons for allowance:

It is generally known to measure oxygen content in beverage making as well as beverage dispensing and filling.

For example Moll et al. (US Patent 4,129,029) discloses continuously monitoring oxygen in a line supplying wort, yeast and gas (components of a beverage in the process of being made) to a fermentation tank (inherently storing the beverage components before the beverage is filled into bottles) in order presumably to control the ratios which are critical process variable in the fermentation process.

However, it is not known to measure the oxygen content in the headspace of a beverage fermentation process, which would be the necessary sort of reference to provide motivation for modifying the Moll reference to read upon the instant invention. Monitoring dissolved oxygen in a beverage fermentation tank is known (e.g. Sugama et al. in US Patent 5,281,323) but dissolved oxygen is clearly different from headspace oxygen in terms of how they effect the liquid being processed.

Monitoring headspace oxygen is known in fermentation tanks used in sewage processing (e.g. Arthur in US Patent 3,740,320). While monitoring oxygen in sewage treatment is generally related to monitoring the biological process of fermentation the specific organisms and needs of the organisms and actions that occur as a consequence of the information about the oxygen content are quite different in the arts of sewage treatment and beverage making and Examiner does not consider the teachings apply. Furthermore, the instant invention is not quite related to beverage process as in the Moll reference because Moll is concerned with promoting or controlling biological activity in the tank and the instant invention is not.

Ishikawa et al. (US Patent 4,579,631) teaches measuring oxygen content in the gas or liquid phases within a fermentation tank but offers no clear motivation for why it might be useful in combination with Moll.

The Kawasumi et al. (JP 10-010020 A), Garza (US Patent 3,849,070), Webster (US Patent 4,282,182) Seiden et al. (US Patent 5,426,593) and Sanfilippo et al. (US Patent 6,032,438) references teach measuring headspace gas in beverage containers but after it has already been loaded into drink containers, not in a container supplying beverage to be filled as in the instant invention.

Schwartz et al. (US Patent 6,228,259) teaches measuring the oxygen content in storage tank beverage to be filled but Schwartz as with the other beverage related references above is concerned with dissolved oxygen, not headspace oxygen.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably

accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Charles D. Garber whose telephone number is (571) 272-2194. The examiner can normally be reached on 6:30 a.m. to 3:00 p.m..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Hezron Williams can be reached on (571) 272-2208. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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